# Jordan University of Science and Technology

# Faculty of Medicine

# 2018-2019

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| **COURSE TITLE :** | **Dermatology** |
| **COURSE CODE :** | **MED 417** |
| **CREDIT HOURS :** | **2.25 HOURS** |
| **SEQUENCE :** | **YEAR 4, 2 WEEKS ROTATION** |
| **COURSE COORDINATOR:** | **Dr. Diala Alshiyab** |
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# Course Description:

Students are rotated during for 2 weeks in Dermatology to various clinics at King Abdullah University Hospital and 2 other community hospitals. Dermatology clinics tend to be very busy and during these sessions' students are exposed to many patients with various dermatological problems. During clinics emphasis is directed at teaching students how to obtain History and do proper dermatological examination for patients with various Dermatoses. Also, students get to see various Bed-side diagnostic tools (Wood's Light, Diascopy, KOH…) being used and they should become familiar with using these diagnostic aids themselves and know how to interpret them and use that towards reaching final diagnosis. Discussion towards differential diagnosis, diagnostic workup and then principles of management is also done bed-side for especially the common Dermatoses.

Daily seminars will be held and focused on common skin diseases as shown in seminar topics. The students will be responsible for most of the discussion and presentation. A facilitator (consultant or resident) is only coordinating the discussions and making sure that the students are adherent to the relevant seminar topic areas and objectives. The topics covered are pre-decided on by course teachers and cover the main areas students are expected to know during the course. General aspects of management appropriate to student's level is also discussed. During the clinical teaching students may be asked to prepare clinical cases (including history, dermatologic examination and management) for selected cases. Additionally, students may be asked to do more in-depth search about certain clinical conditions, associated complications and specific aspects of management including treatments used especially in dermatology.

# Course Learning Outcomes

1. Demonstrate a sufficient understanding of the structural organization and functions of the following: Anatomy, physiology and function of various skin structures, layers and as an Immune organ.
2. Demonstrate a sufficient knowledge of how to take History and do dermatological examination using dermatological descriptive terms.
3. Demonstrate the ability to use Bed-side diagnostic tools used in dermatology that can help in narrowing or reaching definitive diagnosis for various Dermatoses.
4. Identify the common skin disorders and their clinical presentations, complications, diagnostic workup for common Dermatoses.
5. Demonstrate the knowledge of the basic principles about managing common dermatological disorders.

# Recommended Textbooks and Atlases:

| Book (Resources) |
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| 1. Clinical Dermatology (Last edition) by HUNTER, SAVIN and DAHL. |
| 2. Web sites: |
| • www.bad.org.uk |
| • www.aad.org |
| • www.dermnetz.org |

# Learning Objectives

## Lectures objectives

| Topic | Objectives: |
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| 1. Introduction to clinical dermatology | a. Understand the basic skin structure for both epidermis and dermis and function of various cells within skin.<br>b. To know the importance of skin as barrier and its role as an immune organ.<br>c. Know how to perform dermatological history and do dermatologic examination using dermatologic terminology.<br>d. To know how to link the dermatologic examination findings with differential diagnosis first as groups then as specific diseases.<br>e. To develop a diagnostic approach to patients presenting with skin disorders based on dermatologic history and examination in relation to various clinical presentations.<br>f. To know the value of additional bed-side diagnostic tools in dermatology especially Wood's light, KOH, Dermoscopy, Tzanc smear and patch test and their role in diagnosis of various skin disorders |
| 2. Approach to patients with eczematous rash: atopic, discoid, Allergic contact, irritant contact, pompholyx and seborrhoeic eczema. | a. Know the common types of eczema and the main clinical presentation for each especially: atopic, discoid, Allergic contact, irritant contact, pompholyx and seborrhoeic eczema.<br>b. Know the major complications related to various forms of eczema<br>c. Know the principles of management of various forms of eczema. |
| 3. Approach to patients with Common Red Scaly Rash (Papulosquamous disorders):<br>Psoriasis, Lichen planus and Pityriasis Rosacea. | To develop a diagnostic approach to common diseases within the papulosqumaous disorders based on history and clinical presentation.<br>b. Understand the important factors in the pathogenesis of Psoriasis including, genetics, epidermal cell kinetics and the inflammatory cells and to correlate them with the histopathological findings.<br>c. Describe the clinical features of different types of psoriasis and their differential diagnosis.<br>d. Know the course and major complications of Psoriasis. |

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| | e. To know how to assess the severity of psoriasis and understand the principles of management and the different agents used in the treatment with their side effects.<br>f. know about other papulosqumaous disoders like Lichen planus and Pitryasis rosea, their clinical presentation, course and management. |
| 4. Reactive erythemas: Urticaria, Erythema Multiforme, Erythema Nodosum and Vasculitis. | a. Understand the pathogenesis of various forms of reactive erythemas: urticarial, erythema multiforme, erythema nodosum and vasculitis.<br>b. Understand the relevance of knowing particular types of reactive erythemas and the link to possible underlying causes.<br>c. Understand the importance of performing dermatologic history, examination and additional diascopy in the evaluation of patients with reactive erythemas.<br>d. What are the most important diagnostic tests required for patients with various forms of reactive erythemas.<br>e. Know the principles of management of various forms of reactive erythemas. |
| 5. Approach to patient with common facial rashes ( acne & rosacea ) | a. To understand the pathogenesis of acne & rosacea.<br>b. To be able to diagnose acne and rosacea; define comedones and other clinical presentations, describe the variants of acne and subtypes of rosacea, risk factors, and their complications.<br>c. Learn how to utilize clinical data, clinical examination findings and bed-side diagnostics in approach to differential diagnosis of both acne & rosacea.<br>d. To assess the severity of both acne and rosacea.<br>e. Understand the principles of management of both acne & rosacea and knowing the most important treatment related side effects. |
| 6. Infections 1: Bacterial and viral infections<br><br>-Staphylococcal infections: Impetigo, Folliculitis and boils,<br>-Recurrent staph. Infections.<br>-Human Papilloma virus: warts: common, Plane, Facial, Plantar, Genital<br>-Herpes Virus infection: HSV 1,2,3 | a. To know the resident flora of the skin and describe some clinical problems resulting from its overgrowth.<br>b. Describe the clinical presentation of impetigo both clinically and related complications.<br>c. Define boils, carbuncle and the risk factors for recurrent boils and their management.<br>d. Understand the variation in clinical presentation of HPV infections (clinical types of warts). |

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| | e. To know common HSV infections (1,2,3) in terms of clinical presentation of primary and secondary infection and important complications<br>f. Learn how to utilize bed-side diagnostics in both HPV and HSV (dermatoscpe, Tzanks smear). |
| 7. Infections 2: Fungal and Parasitic<br>Fungal infections: Tinea capitis, Tinea pedis, Tinea corporis, Tinea cruris, Pityriasis versicolour.<br>Parasitic infestations; Scabies and Lice. | a. Describe the presentation of common fungal infections of the skin (Tinea capitis, Tinea pedis, Tinea corporis, Tinea cruris, Pityrisis versicolor) and recognise the circumstances that raise the suspicion of fungal infection.<br>b. To appreciate the value of certain bed side diagnostic tools in the evaluation of patients with possible fungal infection.<br>c. know the general principles of treatment of cutaneous fungal infection and to select the suitable route of antifungal preparation for each condition.<br>d. Describe the clinical presentation of common skin infestations (scabies and lice) and know the general principles of eradication and pitfalls in treatment. |
| 8. Hair and nail disorders: | a. Understand the clinical types of alopecia: diffuse and localized alopecias, scarring and non-scarring alopecias<br>b. Know the most common causes for various forms of alopecia as outlined above<br>c. Know how to perform clinical examination for patients with alopecia with emphasis on hair and scalp examination (normal vs abnormal/broken hairs, presence or absence of openings for hair follicles and scalp examination)<br>d. Develop a diagnostic approach to patients with hirsutism: definition, underlying mechanisms and diagnostic workup based on clinical presentation (cutaneous vs systemic virilization)<br>e. Know the most common causes of nail disorders: psoriasis, onychomycosis and lichen planus and the typical clinical presentations for each.<br>f. Understand the principles of treatment for patients with hair and nail problems |
| 9. Approach to patients with Pigmentary change: Hyper and hypopigmentation. | a. To understand the mechanisms involved in common types of hyper and hypo-pigmentaion<br>b. To know the causes and clinical presentations for common skin diseases associated with hyperpigmentation; post-inflammatory hyperpigmentation & melasma, freckles, tumors and others<br>c. To know the common causes of hypopigmentation; post inflammatory |

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| | hypopigmentation & vitiligo, how to differentiate between them.<br>d. How to utilize clinical data, clinical examination findings and bed-side diagnostics in approach to differential diagnosis of both hyper and hypopigmentation.<br>e. Understand the principles of management of both hyper and hypopigmentation. |

# Course Assessment

| Assessment | | |
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| **Assessment Type** | **Expected Due Date** | **Weight** |
| Mini-OSCE Exam | | **40** |
| Evaluation | | **15** |
| **Final Exam (written)** | | **45** |
| **Total** | | **100** |

# Students Learning Outcomes

| **Student Learning Outcomes(SLOs)<br>(4-8 Maximum)**<br>Upon successful completion of this course, students should be able to: | | | |
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| **SLOs** | **Related ILO(s)* (numbers only)** | **Evaluation Criteria (MCQ, OSCE, Homework…)** | |
| | | **Type of Criteria (MCQ, OSCE, Homework…)** | **Weight (%)** |
| Students should know the basic Anatomy, physiology and function of various skin structures, layers and as an Immune organ (skin immune system). | **1** | **OSCE** | **10** |
| Students should become able to do History and dermatological examination using dermatological descriptive terms (primary and secondary lesions). | **4,6** | **OSCE** | **10** |
| Students should become familiar with Bed-side diagnostic tools used in dermatology that can help in narrowing or reaching definitive diagnosis for various Dermatoses. | **5,7** | **OSCE** | **10** |
| Students are expected to know clinical presentations, complications, diagnostic workup for common Dermatoses. | **5,7,8** | **OSCE** | **45** |
| Students are expected to know basic principles about managing common dermatological disorders. | **9** | **OSCE** | **25** |
| | | | **100** |

# Intended Learning Outcomes (ILOs)

1) Demonstrate a sufficient understanding of the structural organization and functions of the following systems of the human body: circulatory, respiratory, gastrointestinal, endocrine, hematopoietic & lymphatic, musculoskeletal, nervous, and genitourinary systems.
2) Conceptualize the cellular, molecular, genetic, and biochemical mechanisms that maintain body's homeostasis and their derangements in disease states.
3) Apply their knowledge of human anatomy and function to solve questions regarding major clinical cases and diseases.
4) Attain appropriate and systematic clinical history of different medical conditions and settings.
5) Demonstrate proficiency in performing clinical skills and procedures.
6) Perform relevant physical examination on patients professionally and ethically.
7) Identify the major signs and symptoms of disease states, recognizing risk factors and etiologies, in an interdisciplinary approach to differentially diagnose patients.
8) Order and interpret results of relevant basic diagnostic procedures, such as laboratory investigations and conventional imaging procedures.
9) Apply safe and accurate methods of pharmacotherapy of major disease states.
10) Critically appraise research studies guided by evidence-based medicine.
11) Demonstrate ability to work in diverse settings and communities.